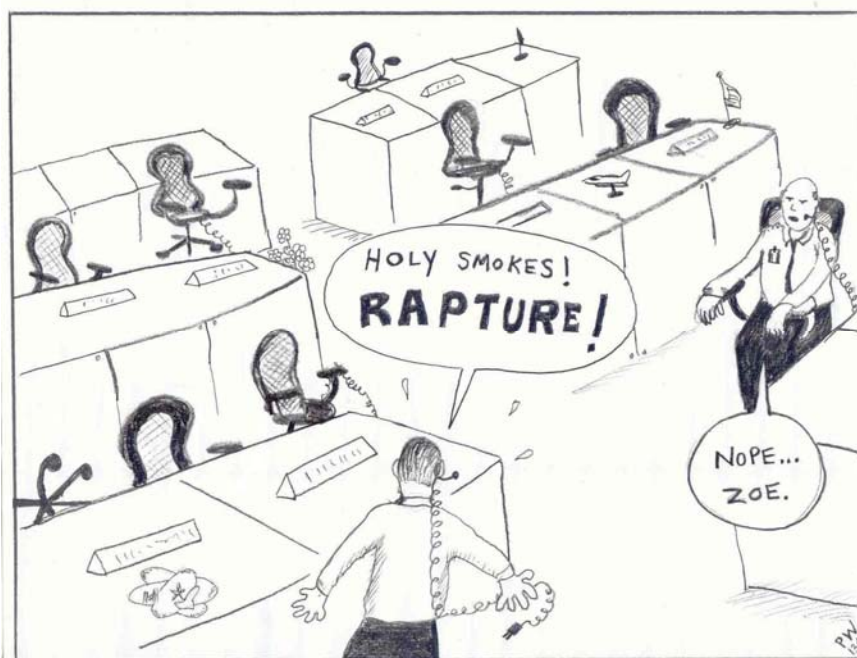


# STS-134/ULF6

## FD 07 Execute Package



MSG	Page(s)	Title
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062	12 - 13	FD07 Mission Summary
063A	14 - 15	FD07 Transfer Message
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065	19	STS-134/ULF6 FD7 EVA deltas
066D	20	ATV2 Cargo List
067A	21 - 26	JLP CWC-I Relocation
068	27	FD06 MMT Summary
069	28	FD07 Crew Choice Downlink Opportunities



**Approved by FAO:** M. Scheib  
**Approved by OpsPlan:** J. Kitchen

*Michael Scheib*

Last Updated: May 22 2011 12:23 AM GMT  
**JEDI** (Joint **E**xecute package **D**evelopment and **I**ntegration), v3.0

## MSG 061 (27-0653) - FD07 FLIGHT PLAN REVISION

Page 1 of 11

### MSG INDEX

MSG NO.	TITLE
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061	FD07 Flight Plan Revision
062	FD07 Mission Summary
063	FD07 Transfer Message
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065	STS-134/ULF6 FD7 EVA Deltas
066	ATV2 Cargo List
067	JLP CWC-I Relocation
068	FD06 MMT Summary
069	FD07 Crew Choice Downlink Opportunities

#### 1. Post-Sleep Cryo Config

For today's post-sleep cryo config, O2 tanks 2, 3, & 4, and H2 tanks 2 & 5 will be active.

**R1 O2,H2 MANF VLV TK2 (two) - OP (tb-OP)  
O2 TK3 HTRS A,B (two) - AUTO**

**A11 CRYO TK4 HTRS O2 A,B (two) - AUTO**

**A15 CRYO TK5 HTR O2 A - OFF**

#### 2. Pre-Sleep Cryo Config

√MCC for deltas prior to configuring for pre-sleep.

For tonight's pre-sleep cryo config, manifold 2 will be closed with O2 and H2 tanks 2 & 5 active.

**A15 CRYO TK5 HTR O2 A - AUTO**

**A11 CRYO TK4 HTRS O2 A,B (two) - OFF**

**R1 O2 TK3 HTRS A,B (two) - OFF  
O2,H2 MANF VLV TK2 (two) - CL (tb-CL)**

#### 3. EVA Prep

Taz, Before Drew and Spanky get too far into EVA Prep, please see MSG 27-0652 (134-065) STS-134/ULF6 FD7 EVA DELTAS which contains a few final pen & inks to the EVA2 Procedures. Let us know if you or they have any questions. We are excited for today's EVA!

#### 4. Message 069 contains Crew Choice Downlink opportunities during Post Sleep and PreSleep on FD7

#### 5. REPLACE PAGES 2-22 AND 2-24, AND 3-68 THROUGH 3-75.

REPLANNED

GMT 05/22/11 (142)

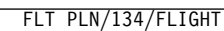
MET Day 005

STS 134	FD07	CDR MARK	SLEEP	POST SLEEP	PMC S/G	HYG BRK/ HATCH CLS	CAMPOUT EVA PREP	EMURGE	EMU P/B	C.LK DPRS	STRMACT	P/TV07 EVA				MEAL	P/TV07 EVA				PLRPS	
	PLT BOX	SLEEP	POST SLEEP				IMU	POST SLEEP	INAHIB	PCINWCT #5	CTWCR #5	CWCXFER	STOWAGE OPS				MEAL	SSRMS SPDM LUBE		CRRMV	STOWAGE OPS	
	MS1 SPANKY	SLEEP	POST SLEEP	HYGIENE BREAK/ P/B		CAMPOUT EVA PREP	EMURGE	EMU P/B	C.LK DPRS	P-DEGRESS SETUP	PRE-POUT 4	ATA TO FILL	PSARJ REMOVE COVERS	PSARJ 1ST LUBE	P3-P4 NH3 JUMPR STOW	S1 RAD GRPL BAR STOW	PSARJ 2ND LUBE	PSARJ INSTALL COVERS	CINGRPS	PLRPS		
	MS2 ROBERTO	SLEEP	POST SLEEP				IMU	POST SLEEP	INAHIB	PCINWCT #5	CTWCR #5	CWCXFER	MDDK XFER				MEAL	STOWAGE OPS				
	MS3 DREW	SLEEP	POST SLEEP	HYGIENE BREAK/ P/B		CAMPOUT EVA PREP	EMURGE	EMU P/B	C.LK DPRS	P-DEGRESS SETUP	PRE-POUT 4	P5/P6 NH3 FILL/VENT	PSARJ REMOVE COVERS	EAS SETUP/ VENT	NH3 VENT TOOL CLNUP	NT30 JUMPR	SPDM CLA CVR INSTL	SPDM LEE LUBE	PSARJ 2ND LUBE	PSARJ INSTALL COVERS	CINGRPS	PLRPS
	MS4 TAZ	SLEEP	POST SLEEP	HYG BRK/ HATCH CLS		CAMPOUT EVA PREP	EMURGE	EMU P/B	C.LK DPRS	EVA 2 (6:30) EVA 2 IVA SUPPORT												E X E R C I S E
NO EXERCISE		NO UNISOL EXER [A]														NO UNISOL EXER [B]						
DAY/NIGHT		87 88 89 90 91 92 93 94 95																				
ORBIT		87 88 89 90 91 92 93 94 95																				
TDRS		87 88 89 90 91 92 93 94 95																				
ISS		87 88 89 90 91 92 93 94 95																				
TDRS		87 88 89 90 91 92 93 94 95																				
AVAIL		87 88 89 90 91 92 93 94 95																				
ORB ATT		87 88 89 90 91 92 93 94 95																				
NOTES		[A] NO UNISOLATED EXERCISE [EVA CREW OUTSIDE OF SARJ] [B] NO UNISOLATED EXERCISE [APFR FOR SPDM LEE LUBE]																				
		*FILTER CK @STATUS CHECK #STATUS CHECK 2-22																				
		BIAS -XLV -ZVV +STOW																				
		FLT PLN/134/FLIGHT																				

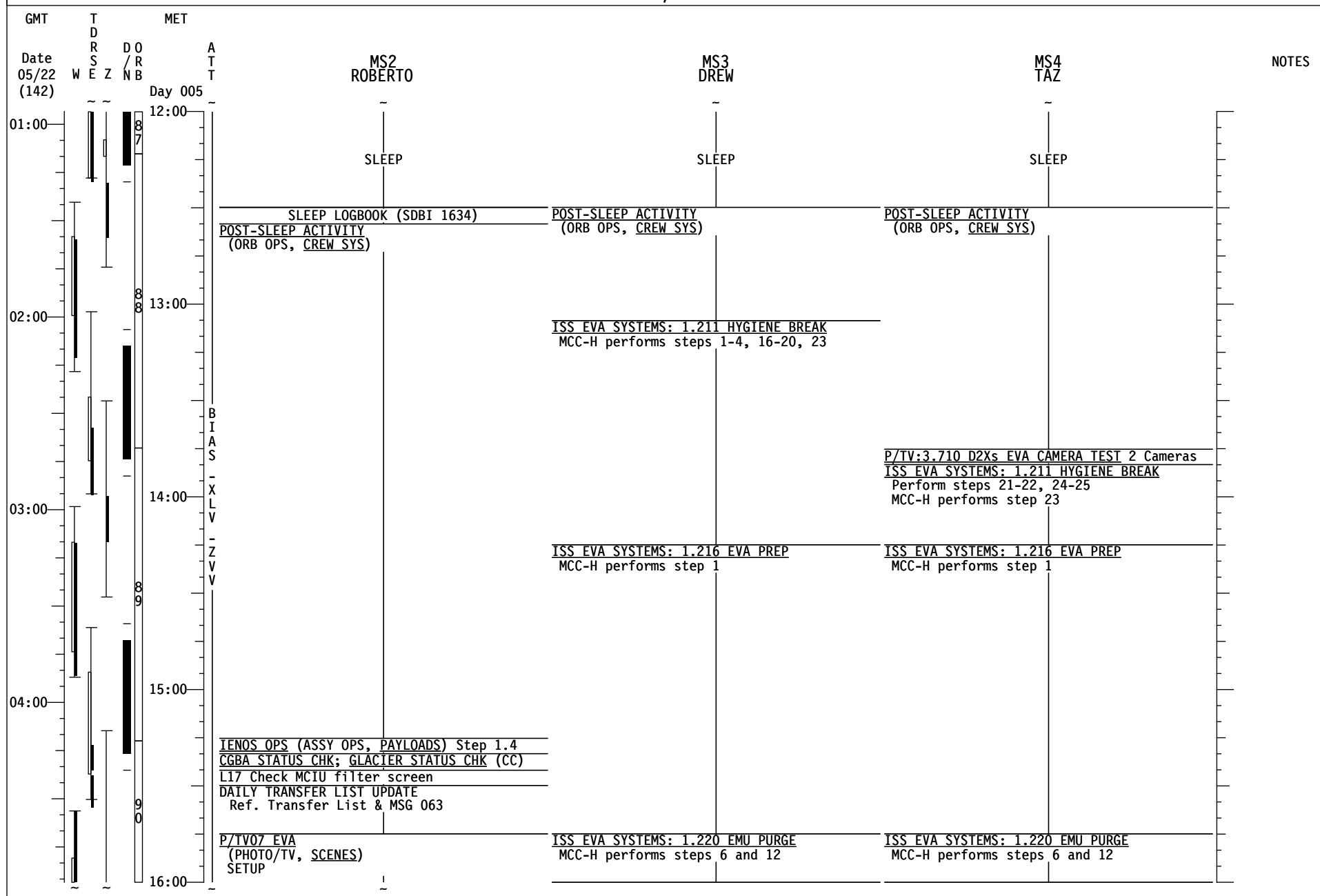
GMT 05/22/11 (142)

MET Day 006

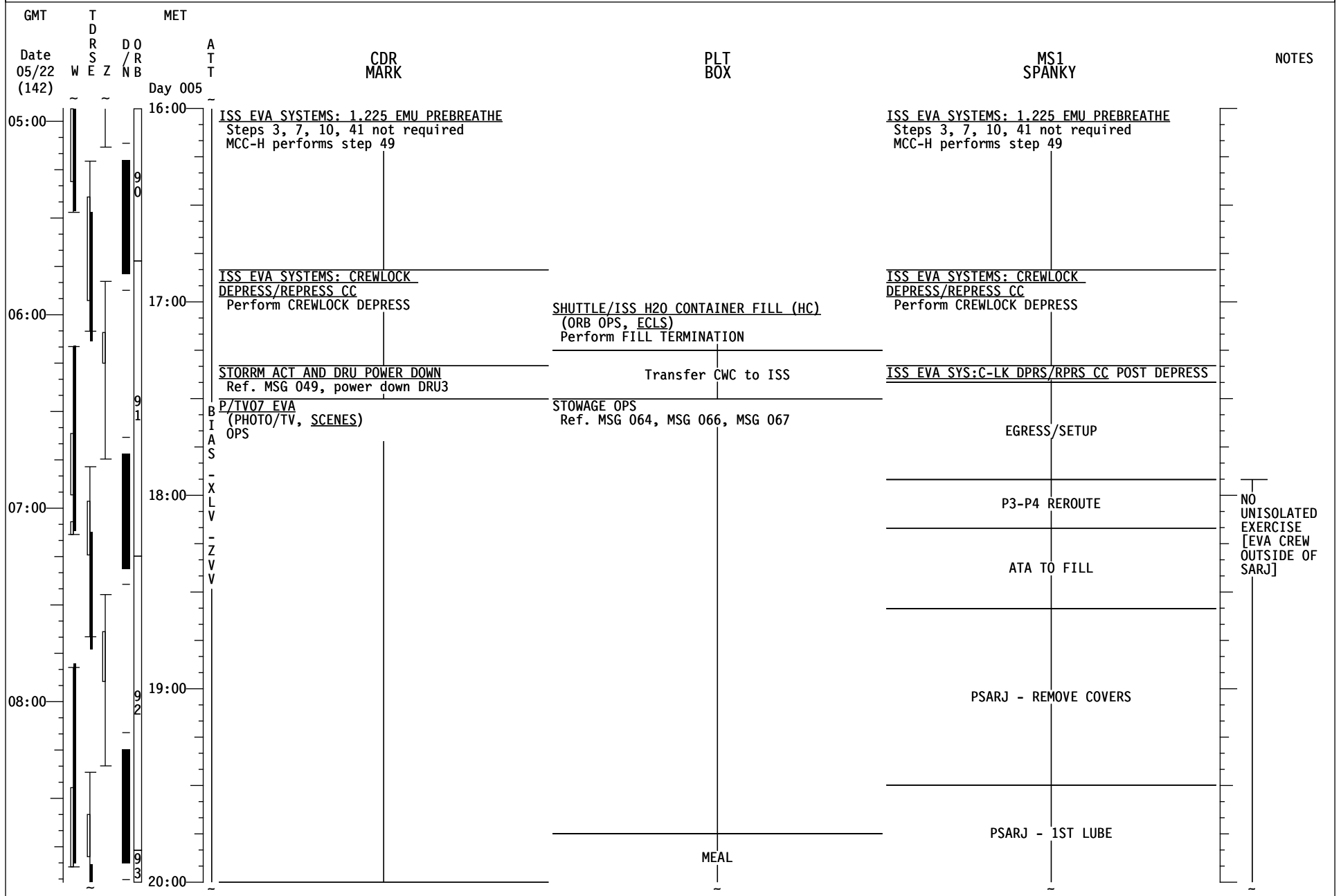
FLT PLN/134/FLIGHT



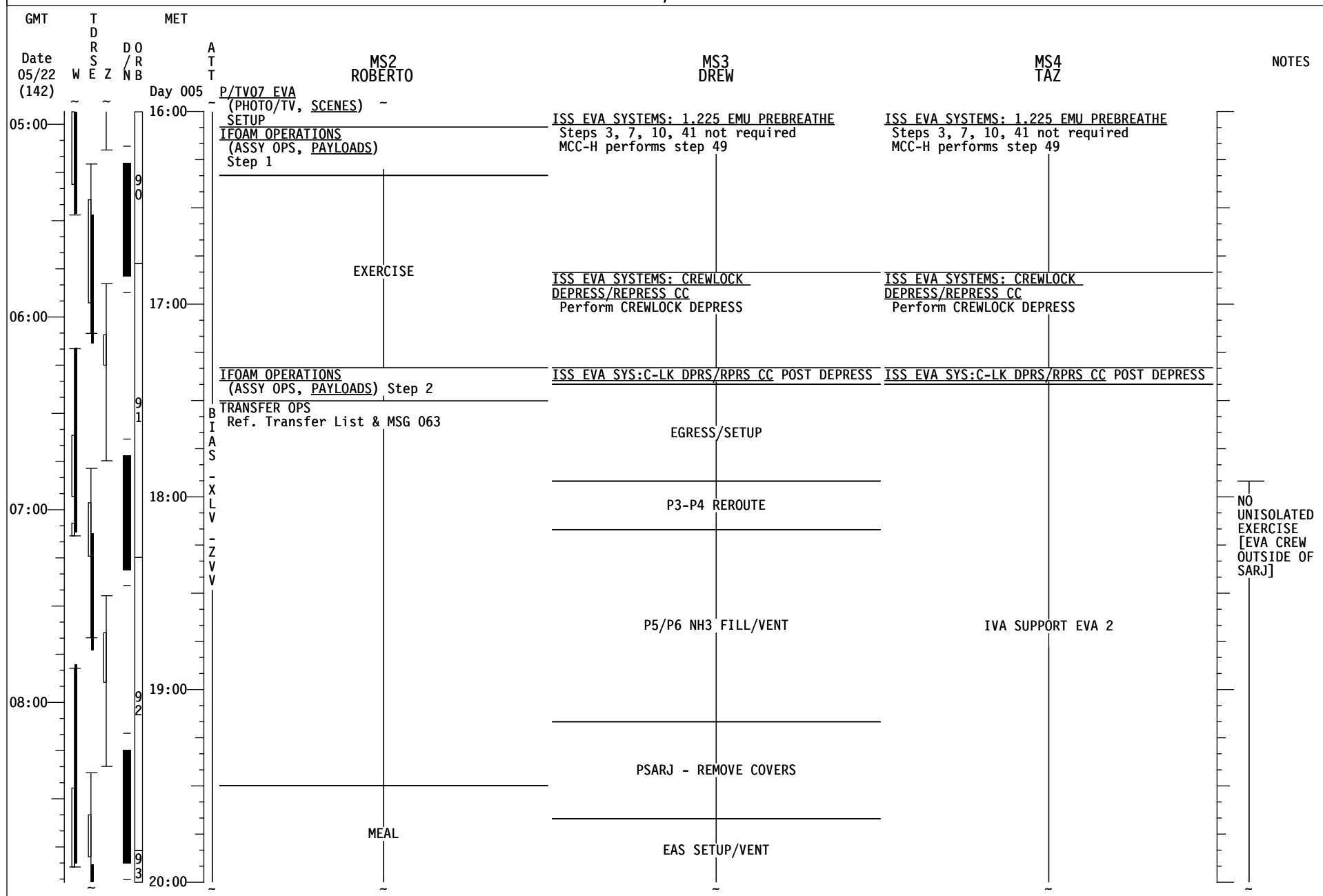
## STS-134/ULF6 FD07



# STS-134/ULF6 FD07

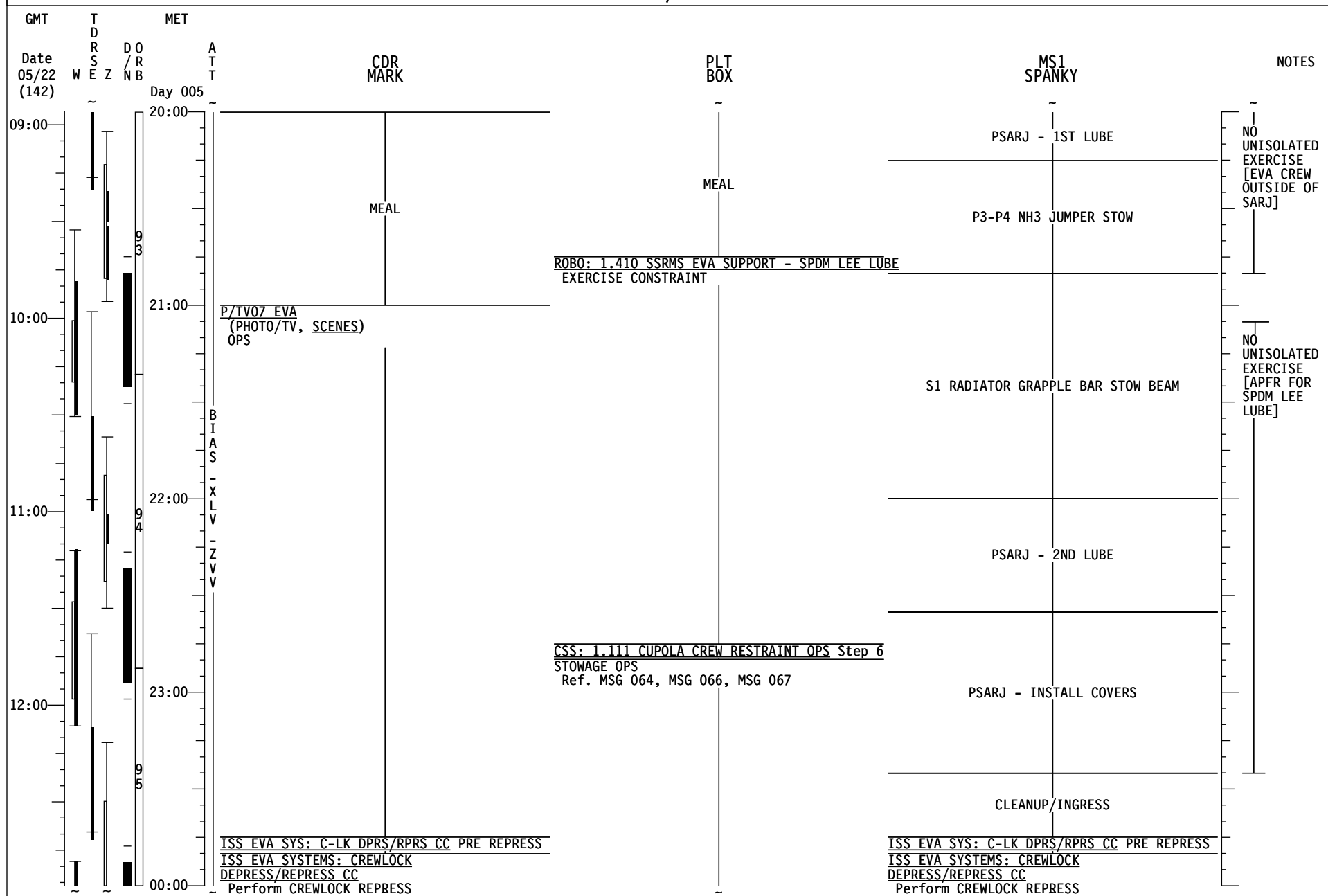


## STS-134/ULF6 FD07

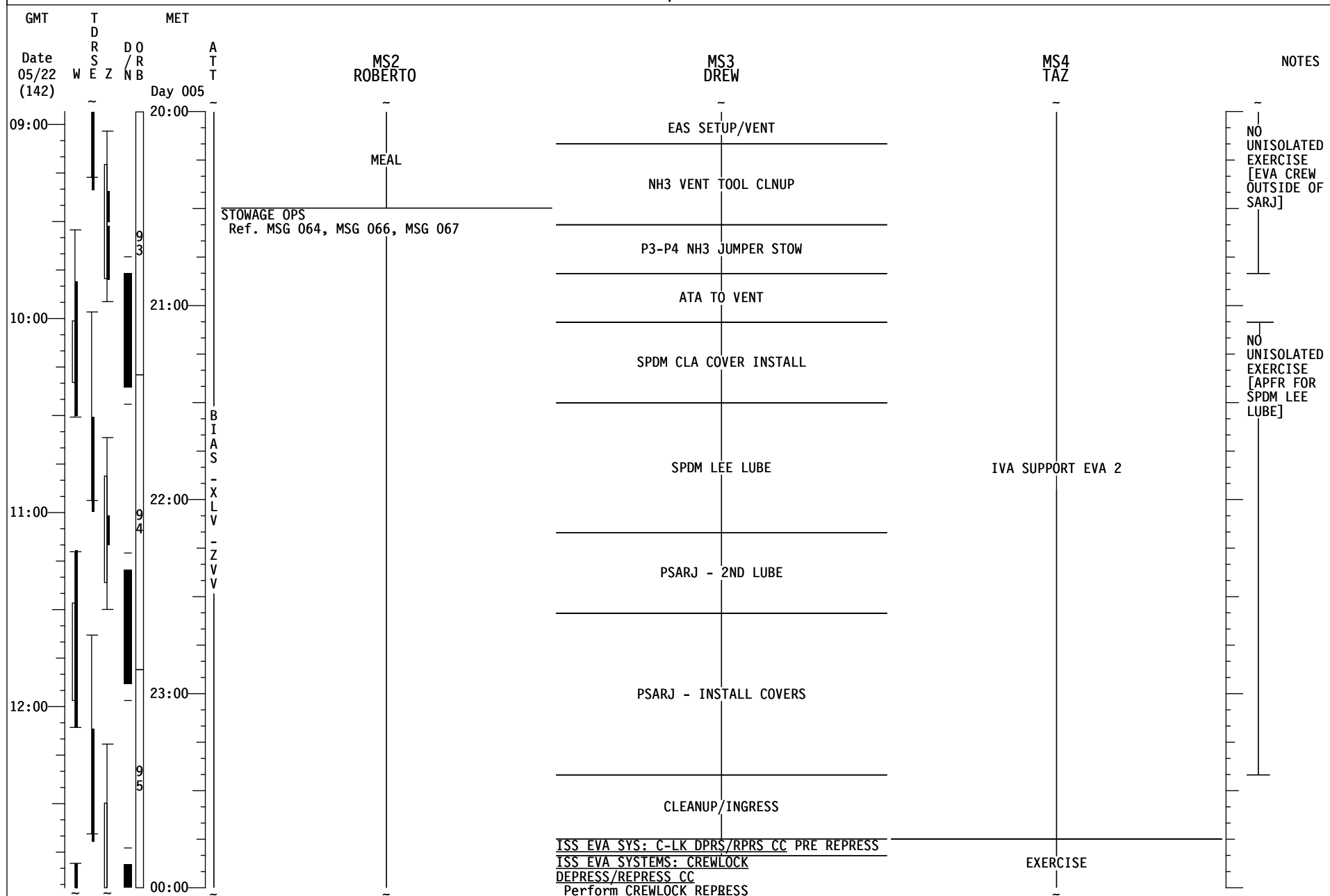




## STS-134/ULF6 FD07



## STS-134/ULF6 FD07



# STS-134/ULF6 FD07

GMT	T D R S E Z	MET	CDR MARK	PLT BOX	MS1 SPANKY	NOTES
Date 05/22 (142)	W	Day 006	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS ISS EVA SYSTEMS: 1.240 POST EVA With H2O RECHARGE Steps 37, 39, 66 not required MCC-H will perform Steps 43, 67-68 ISS EVA SYSTEMS: 1.225 EMU PREBREATHE Perform step 41 to remove Metox canister Ref. STS-134 CONSUMABLES TRACKING CC	STOWAGE OPS Ref. MSG 064, MSG 066, MSG 067 STOWAGE BRIEF Call down status to MCC via A/G 2	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS ISS EVA SYSTEMS: 1.240 POST EVA With H2O RECHARGE Steps 37, 39, 66 not required MCC-H will perform Steps 43, 67-68 ISS EVA SYSTEMS: 1.225 EMU PREBREATHE Perform step 41 to remove Metox canister Ref. STS-134 CONSUMABLES TRACKING CC	
13:00		00:00				
		01:00		EXERCISE		
14:00			POST EVA TAGUP Private Conference via S/G 2	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
		02:00	STORM DAILY DEACT (CUE CARD) ILLUMINATOR OPS (CC,TV) ILLUMINATORS ON-A,D PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
15:00			VL9 PS AUD A/G 1,2 (two) - OFF PRIVATE MEDICAL CONFERENCE Private Conference via A/G 2 PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	L OMS ACCUMULATOR REPRESS [A] PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
		03:00		[A] C3 OMS ENG LEFT - ARM/PRESS (Wait 5 Seconds) - OFF		
16:00						
		04:00				

CREW WAKE AT 06/12:00

## STS-134/ULF6 FD07

GMT	T D R S E Z	MET	MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
Date 05/22 (142)	W	D O R B N B	A T T			
		Day 006				
13:00		00:00	STOWAGE OPS Ref. MSG 064, MSG 066, MSG 067	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS ISS EVA SYSTEMS: 1.240 POST EVA With H2O RECHARGE Steps 37, 39, 66 not required MCC-H will perform Steps 43, 67-68 ISS EVA SYSTEMS: 1.225 EMU PREBREATHE Perform step 41 to remove Metox canister Ref. STS-134 CONSUMABLES TRACKING CC		
			TRANSFER BRIEF PREP Coordinate with transfer counterparts		EXERCISE	
			TRANSFER BRIEF Call down status to MCC via A/G2			
		01:00	CGBA STATUS CHK; GLACIER STATUS CHK (CC) PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
14:00						
				POST EVA TAGUP Private Conference via S/G 2	POST EVA TAGUP Private Conference via S/G 2	
		02:00		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
15:00						
		03:00				
16:00						
		04:00				
			CREW WAKE AT 06/12:00			

MSG 062 - FD05 MISSION SUMMARY

Good Morning Endeavour!!!!

Great job with the focused inspection yesterday!

Endeavour has been cleared for entry!!

Looking forward to another great EVA today!

AMS continues to operate on ISS nominally. Yesterday, AMS received ~50 million events and collected 90 Gb of data! This is more data than expected!

YOUR CURRENT ORBIT IS: 187 X 183 NM

NOTAMS -

EDW -	EDW 22L/04R IN USE. EDT 22R/04L EMERGENCY DAY USE ONLY.
EDW -	LAKEBED RWYS RED.
NOR -	LAKEBED RWYS GREEN.
HNL -	RWY 08R/26L CLSD
NTU -	RWY 05R/23L CLSD.
FFA -	NOT USABLE. IN CARETAKER STATUS.
LAJ -	RWY WIDTH REDUCED TO 154' - EAST SIDE OF RWY CLSD.
BEN -	NOT USABLE. NOT SUPPORTED.
IKF -	NOT USABLE. NO AGREEMENT

NEXT 2 PLS OPPORTUNITIES:

NOR17 ORB 94 – 5/22:12 SKC 7 150/06P08  
EDW22 ORB 110 – 6/22:33 SCT150 BKN250 7 240/15P22

OMS TANK FAIL CAPABILITY:

NO

LEAKING OMS PRPLT BURN:

L or R OMS LEAK: ALWAYS BURN RETROGRADE

OMS QUANTITIES(%) (POST Ti)

L OMS OX = 33.23	R OMS OX = 34.28
FU = 33.24	FU = 33.95

END OF PAGE 1 OF 2, MSG 062

MSG 062 - FD05 MISSION SUMMARY

FOR CURRENT QTYS, SUBTRACT INCN'T COUNTER

DELTA V AVAILABLE:

OMS	346 FPS
ARCS (TOTAL ABOVE QTY1)	46 FPS

TOTAL IN THE AFT	392 FPS
------------------	---------

ARCS (TOTAL ABOVE QTY2)	79 FPS
-------------------------	--------

FRCS (ABOVE QTY 1)	31 FPS
--------------------	--------

AFT QTY 1	82 %
-----------	------

AFT QTY 2	44 %
-----------	------

END OF PAGE 2 OF 2, MSG 062

MSG 063A (27-0654A) - FD07 TRANSFER MESSAGE

Page 1 of 5

Good morning Roberto & Mark!

Hope you enjoyed your Transfer-Free day! We have a few more of those lined up for you throughout the flight, and at the rate that you guys are transferring, we may have more! Today you'll start with your Stowage Ops, as well. The Stowage Team is sending up a separate message with those details.

The Transfer List Excel file, FD07\_Transfer\_List\_STS134.xls, is located on the KFX machine in **C:\OCA-up\transfer** (and available via the **PGSC homepage**).

For ISS, the Transfer List Excel file, FD07\_Transfer\_List\_STS134.xls, is located in **K:\OCA-up\transfer**.

**FD07 Choreography**

- None Identified

**Transfer Notes**

- You are GO to transfer Return Bag 401. There are still some samples to be taken, but those will be added directly to MF14E when they're taken.
- We copied that 3.0 CTB s/n 1016 was temp stowed on the Middeck for the CWC fills. As you probably know, the Silver Biocide kits that you're using for those fills came over in that CTB. Those Silver Biocide Kits should return on the Shuttle in Bag H per Item 736. Would you like us to call Item 736 complete since they're on the Shuttle? Or leave it unchecked as a reminder to you to confirm that you've taken them out of the CTB and stowed them in Bag H?
- On FD05, Cady took a Microbial Sample and showed a very small amount of growth. Typically, that small amount of growth does not require returning the sample, so Cady threw the sample out. Since then, the ground teams have decided that they do want the sample returned. Cady has been notified and she mentioned she'd try to find the sample. If she finds it before she leaves, we'd like to return the sample and you'll see this on the Transfer List in the next few days. Please let us know if she does not find the sample prior to her departure.
- Also, please note that some of your crew members will be sleeping while you're working on transfer ops – so keep that in mind when working near sleep stations.

**Change Pages**

Please incorporate changes as follows:

In the Transfer List **RETURN** tab

Replace pages 1 & 9

Add page 10

END OF PAGE 1 OF 5, MSG 063A (27-0654A)

MSG 063A (27-0654A) - FD07 TRANSFER MESSAGE  
Page 2 of 5

**Change Details**

401: Constraint removed

401.1: Added the COL ITCS sample that will be collected on FD14.

906: Adding a 0.5 CTB containing 4 EVA Gloves with a T61p Battery inside. Battery needs to be bagged and bubble-wrapped prior to transfer.

907, 907.1, 907.2, 907.3: You will need to retrieve an empty 0.5 CTB from ISS and fill it with some EVA items that have now been approved for return (items 907.1, 907.2, and 907.3)

908 and 909: Adding some MSG Tapes that have recently been approved for return. These tapes should go in the 1.0 CTB already stowed in MF71C.

END OF PAGE 2 OF 5, MSG 063A (27-0654A)



Box and Roberto,

Welcome to your first day of ISS Stowage Ops! Today you have approximately 7 hours of Stowage Ops between the two of you. Our recommendation is for Box to start with ULF6 Unpack. Later, when you're paired up, we would like you to work on ATV Cargo Ops. In the ATV, you'll start with adapter plate installations and the Temporary Stowage Rack (TSR) deploy, which are tasks that require two crew members.

For ATV ops – you're going to start by installing four adapter plates. Paolo should have shown you which tools to use, or have them already pregathered for you. The adapter plates act as pairs – the straps on the top and bottom on the plates have either male or female clasps, so you'll need to find the matching plates in order to effectively mount the M bags. We've specifically picked out plates for you to use on the S2 rack. Since you're only adding one plate to the P2 rack, you'll have to take a look to see which plate is already there and find a match.

Also, please note that some of your crew members will be sleeping while you're working on stowage ops – so keep that in mind when working near sleep stations. Don't hesitate to call down with any questions!

Good luck!!

■ *ATV2/ ULF6 ISO Team: Kelly, Mike, Jaclyn, Misty, Eryx, & Nikhail*

### **Choreography:**

Box – ULF6 Unpack (7 hours but can be done one CTB at a time)  
Execute per Transfer List Book, Unpack Tab.

Box and Roberto – ATV Cargo Ops: Reference 27-0290D: ATV2 Cargo List

1. Install final plate on ATV2P2
  - a. Take close out photos of the ATV2P2\_A1 and ATV2P2\_A2.
  - b. Mount plates per US SODF; ATV Cargo Ops: Prep for Undock; 3.200 ATV RACK ADAPTER PLATE INSTALLATION.
    - i. Plates are stowed in ATV2O1\_A0 and E0 locations
  - c. Please don't use plate with barcode "PLATE023". This is specifically labeled for the ReBR payload.
2. Plate over ATV2S2
  - a. We understand that this rack may not be 100% full. Please take a picture of each rack sector prior to plating.
  - b. Mount 3 plates on ATV2S2 per US SODF; ATV Cargo Ops: Prep for Undock; 3.200 ATV RACK ADAPTER PLATE INSTALLATION.
    - i. Plates are stowed in ATV2O1\_A0 and E0 locations

- ii. The ATV2S2\_A1/A2 positions don't need to be blocked. Do not install a plate in the 1<sup>st</sup> plate position.
- iii. PLATE021 and PLATE022 are a pair. These should be mounted in the 2nd and 3rd plate positions. The plate with barcode "PLATE023" should be mounted closest to the deck. This is specifically labeled for the ReBR payload. After everything is mounted, ATV2S2 should look like this:



- 3. Mount RFTA bags on ATV2P2
  - a. Trash items 712-712.2, 735-735.2
  - b. The RFTA foam cap from 712.2 will need to be removed and stowed back in the PMM before you xfer the RFTA to ATV for disposal.
- 4. Mount RFTA bag on ATV2S2
  - a. Mount the M-01 bag on the center 2<sup>nd</sup> and 3<sup>rd</sup> adapter plates. This bag is significantly heavier than any other trash item.
- 5. Deploy 2<sup>nd</sup> TSR
  - a. Use US SODF; ATV Cargo Ops: Initial Setup; 1.200 TEMPORARY STOWAGE RACK (TSR) INSTALLATION.
  - b. Unpack Items 8-8.3, related trash item 309
  - c. Unpack item 6 the empty 1.0 CTB can be transferred to the NOD3A2 CTB farm if it is still in ATV.
- 6. Trash ULF6 foam

- a. Trash items 203 – 206. If you have any difficulty with the stowage locations given please let us know.

Below are additional tasks that can be started if time remains:

1. Relocate CTBs w/CWC-Is from JLP to PMM Standoffs (7 hours total – but can be done in 1 hour increments)
  - a. Two crew working simo is recommended for this procedure. This activity involves rotating RSPs and/or removing cargo from rack bays to access the standoff areas.
  - b. Execute per message 27-0487A: JLP CWC-I Relocation Rev A
2. Relocate JAXA Cargo to JEM (1 hour)
  - a. This activity involves relocating a few JAXA items from US stwg locations to permanent homes within the JPM and JLP. It is recommended that you perform this after #1 above since one of the JLP locations must be cleared of CWC-Is prior to the JAXA item being restowed.
  - b. Execute per 27-0530: JAXA Hardware Relocate

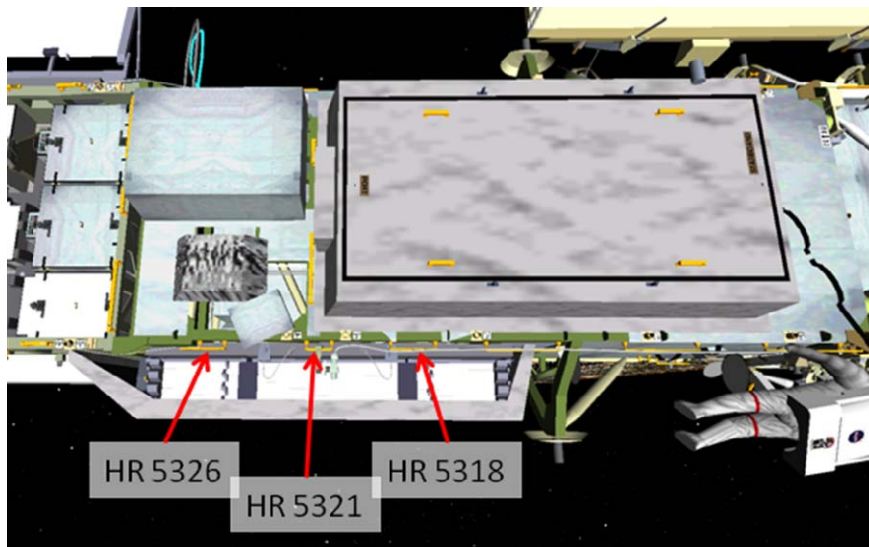
Taz, the following are a few pen & inks for EVA2 (EVA, TIMELINES):

- 1) A Safety tether snag on the SARJ hardware was seen on EVA 1. To prevent future snags, please add a note to Page FS 7-69, EV2 step 19 and Page FS 7-70, EV1 step 4, to route Safety Tether inbd of the SARJ when translating to the aft side to clear the SARJ covers.
- 2) After reviewing flight video, the vent tools are in the expected config. Please disregard the updates that were uplinked in FD6 Execute Package to EV 1 step 13, FS 7-73.

WAS (and IS):

1. Retrieve and attach MUT EE to P6 HR 5321 (straight on HR)
  - ☐ √Locked
  - ☐ Clock L-bracket so it is parallel to HR
- 3) Page FS 7-75, EV1 step 31, if the vent tool lines need more slack due to the kink, Drew is okay to relocate the MUT EE inbd to HR 5318.
- 4) Page FS 7-76, EV1 step 7, if the vent tool lines need more slack for the EAS Jumpers, Drew is okay to relocate the MUT EE outbd to HR 5326 if the vent lines cannot be routed diagonally to reach.

Also, Drew is free to straighten the vent tool extension near the kink if needed. We just do not want him to bend it back on itself anymore.



**27-0290D (MSG 066D) - ATV2 Cargo List**

Please record your updates either by crew notes or by calling down any updates to MCC-H. When calling down updates, please reference the "Item #." If you have any questions, do not hesitate to ask.

Please remove all items from ziplock bags, foam, bubble wrap, and other packing materials except where noted; place all temporary packing materials in Common Trash. Place any empty ziplock bags in the Ziplock Pantry at NOD201. Any ziplocks or bubble wrap that you feel is excess and not needed you can dispose in common trash. There are foam blocks behind bags in all of the rack sectors. Please leave those in place.

Change Flag	<input checked="" type="checkbox"/>	Item #	Item Name [LABEL]	Qty	S/N	Barcode	Launch Stowage Location	Temporary Stowage Location	Recommended Final Location	Constraints/**Comments/PROCEDURE S
D2 Rack										
		6	1.0 CTB [Deck TSR Bag] [SEG33111838-307]	1	1475	CTB00226E	ATV2D2_C1		NOD3A2	
X		8	1.0 CTB [Overhead TSR Bag]	1	1467	CTB00219E	ATV2D2_C2		NOD3A2	
X		8.1	Ballast Plate	2	-	-	ATV2D2_C2 (in 1.0 CTB)		See Trash Tab	**This is Trash Item # 309.
X		8.2	Temporary Stowage Rack [TSR]	1	-	2TSR0002E			ATV2D1_Deployed ATV2O1_Deployed	
X		8.3	Ziplock: Seat Track Studs	1	-	ATV00069E				** Ziplock contains 9 Seat Track Studs
P2 Rack Front										
		41	M-01 Bag [Multifiltration ORU - 2]	1	1027	003006J	ATV2P2_Rack Front	PMM Endcone	ATV2S2_A0	**M-01 Bag will be used to contain 2 RFTAs for disposal on ATV2.  **This is trash item #959
S1 Rack										
	<input checked="" type="checkbox"/>	56.1	Foam	All	-	-	ATV2S1_A2 (in 1.0 CTB)		ATV2S1_A2	**This is Trash Item # 800.
	<input checked="" type="checkbox"/>	56.2	ИПК-1М [GAS MASK]	2	005 006	ATV00059E ATV00060E			ATV2_Deployed	
		56.3	Add On Return Grid [AORG-001]	4	01 02 03 04	00001402E 00001403E 00001404E 00001405E		ATV2_Deployed	COL1D4_E2	
	<input checked="" type="checkbox"/>	56.4	CBEF Humidifier Refill Kit [T6-24289]	2	003 004	CBEHR013N CBEHR014N			JPM1O3_C2 (JEM Bag 6: P/N 80AS56740-119, S/N 001, B/C JBAG0006N)	
		60.2	21.5" Handrail [G11F5200-2]	9	-	-	ATV2S1_B2 (in 2.0 CTB)	Deploy in ATV as needed	ISS_Deployed	**Use in ATV. Prior to undock, these will be removed and deployed in USOS.
S2 Rack Front										
		71	M-01 Bag [RFTA #2] [SEG33111805-301]	1	1007	004378J	ATV2S2_Rack Front	ATV2D1	ATV2S2_A0	**This is Trash Item # 735 946.
	<input checked="" type="checkbox"/>	71.1	Foam	9	-	-	ATV2S2_Rack Front (in M-01 Bag)		See Trash Tab	KEEP foam in M-01 Bag 1007.  **This is Trash Item # 946.1.

### **Increment 27: JLP CWC-I Relocation**

**Goal:** To relocate CWC-Is packed in CTBs from JLP to PMM standoffs. Some CWC-Is that are not currently packed in CTBs will remain on the rack fronts in JLP until another activity.

**Duration:** 7 hours, but can be done in parts

#### **Procedure:**

1. Relocate items per Table A.
  - a. The PF1 standoff has been completed, but 7 empty standoffs remain. See photos below Table A for how to orientate the CTBs in the standoffs.
  - b. It may be necessary to remove a couple CWC-Is from the 3.0 CTBs to manipulate the CTBs into the standoff area due to the airduct. If possible replace the CWC-Is inside the CTB. If not possible, please try to stow the CWC-Is within the standoff outside the 3.0 CTBs.  
NOTE: There have been a few leaks recently. In order to mitigate pressure on the fittings and seals, please handle the CWC-Is and CTBs containing CWC-Is with care.
  - c. Report your results to MCC-H and we will update IMS for you.

#### Notes on accessing the standoffs:

- 1) To access the PF4 standoff, remove enough stowage in F3 to access the PF3 standoff. Access the PF4 standoff through the PF3 standoff.
- 2) To access the PF3 standoff, go through the F3 rack bay.
- 3) To access the PF2 standoff, either go through the PF3 standoff, or rotate the F2 RSP.
- 4) To access the PF1 standoff, rotate the F1 RSP.
- 5) To access the PA4 standoff, go through the A4 rack bay.
- 6) To access the PA3 standoff, go through the P3 rack bay.
- 7) To access the PA2 standoff, either go through the PA3 standoff, or rotate the A2 RSP.
- 8) To access the PA1 standoff, go through the A1 rack bay.

**Table A: CTBs with CWC-Is**

✓	Ref #	Current Location	Item	S/N	B/C	Qty	New Location	Notes
	1	PMM1F4 Rack Front	2.0 CTB	1066	004200J	1	PMM1PA1 Standoff	Please confirm the S/Ns of the CWC-Is in this CTB. IMS shows this as empty after the inventory from the last activity, but we think there are up to 4 CWC-Is in this CTB.
	2	JLP1F2 Rack Front	2.0 CTB	1070 1100	004204J 010688J	2		
	3	JLP1F2 Rack Front	3.0 CTB	1116	006773J	1	PMM1PA2 Standoff	
	4	JLP1S1 Behind HDP	3.0 CTB	1089	006746J	1		
	5	PMM1F4 Rack Front	3.0 CTB	1121	006778J	1	PMM1PA3 Standoff	
	6	JLP1S1 Behind HDP	3.0 CTB	1107	006764J	1		
	7	JLP1F2 Behind HDP	3.0 CTB	1091 1118	006748J 006775J	2	PMM1PA4 Standoff	
	8	JLP1F2 Behind HDP	3.0 CTB	1034 1043	004219J 004228J	2	PMM1PF2 Standoff	
	9	JLP1F2 Behind HDP	3.0 CTB	1048 1085	004233J 006742J	2	PMM1PF3 Standoff	

✓	Ref #	Current Location	Item	S/N	B/C	Qty	New Location	Notes
	10	PMM1F4 Rack Front	3.0 CTB	1073	004258J	1	PMM1PF4 Standoff	Only contains 4 CWC-Is.
	11	JLP1S1 Behind HDP	2.0 CTB	1098 1111	010686J 010699J	2	PMM1PF4 Standoff	



**Photo 1 – 3.0 CTB on end in the standoff (photo from Bldg 9 – note no airduct)**



**Photo 2 – Two 3.0 CTBs stowed in a standoff (photo from Bldg 9 – note no airduct)**





**Photo 3 – On-orbit photo from first completed standoff**



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STS-134/ULF6 FD06 - MMT Summary

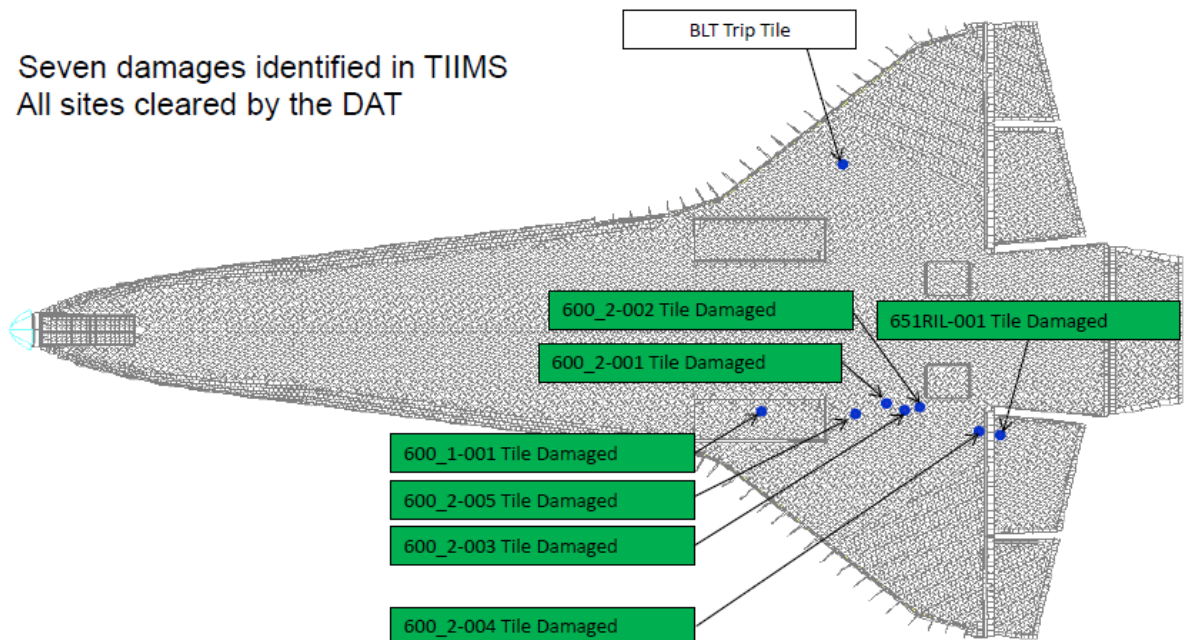
The MMT met today to review the orbiter systems and mission progress.

Endeavour continues to perform exceptionally well.

Thanks to the extras views of damage site 600\_2-001, the DAT team was able to accurately characterize the cavity dimensions allowing them to remove the assumptions/unknowns that were used in the original analysis. With that, that DAT team was able to clear all TPS "Areas of Interest" and Endeavour is cleared for entry at this time. The analysis showed positive margins for all the damage tile sites even in a dispersed Entry case.

Good Luck on EVA 2.

- Seven damages identified in TIIMS
- All sites cleared by the DAT



## MSG 069 FD07 Crew Choice Downlink Opportunities

### 1 Post-Sleep Morning of FD7

TDRS	AOS	LOS	Delta (min)	Notes
W-TDW	5/12:40	5/12:58	18	
E-TDE	5/13:39	5/13:51	12	
W-TDW	5/14:15	5/14:48	33	
E-TDE	5/15:17	5/15:24	7	
W-TDW	5/15:51	5/16:22	31	After Post-Sleep

2

### 3 Pre-Sleep Evening of FD7

TDRS	AOS	LOS	Delta (min)	Notes
E-TDE	6/02:21	6/02:33	12	

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